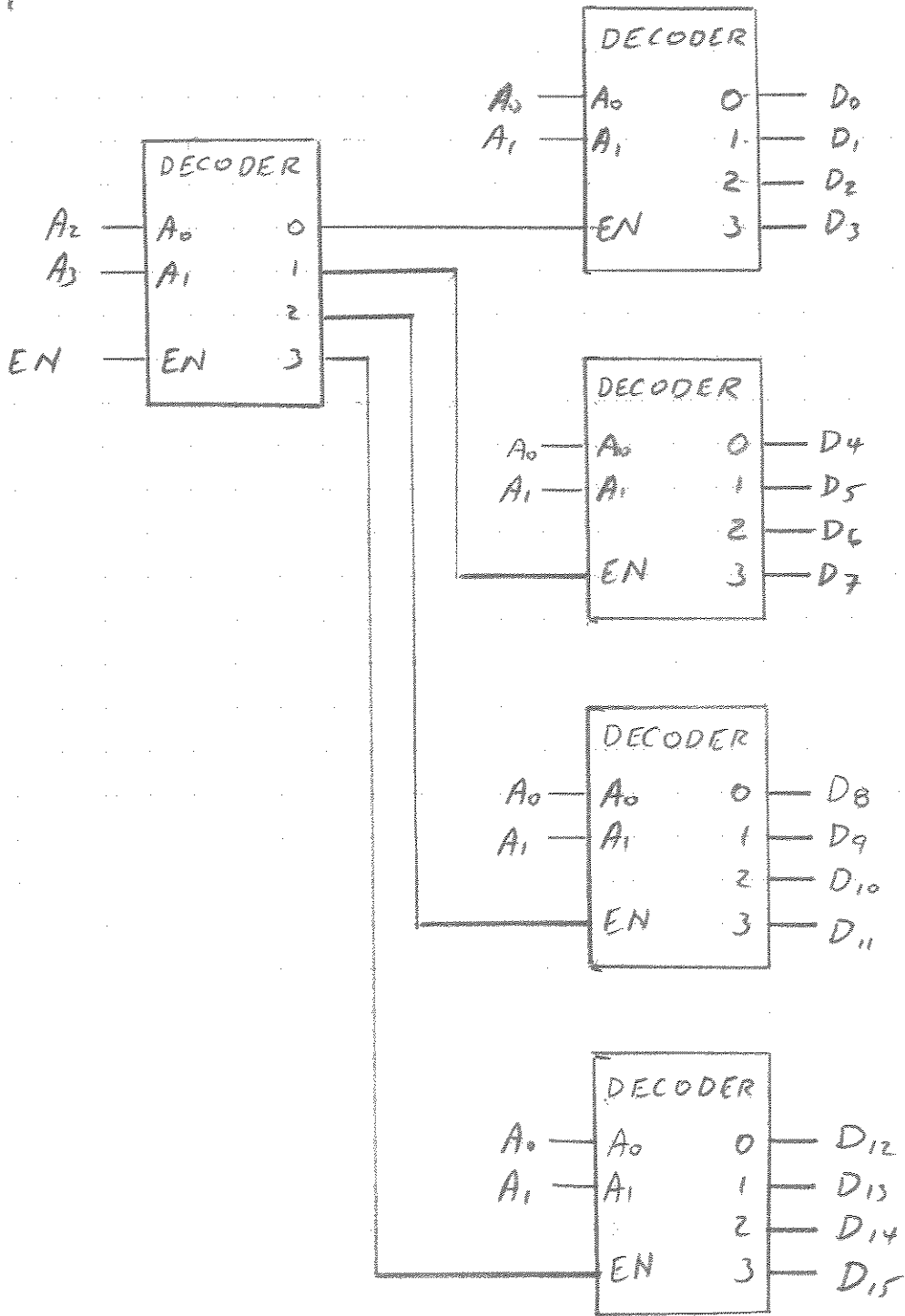


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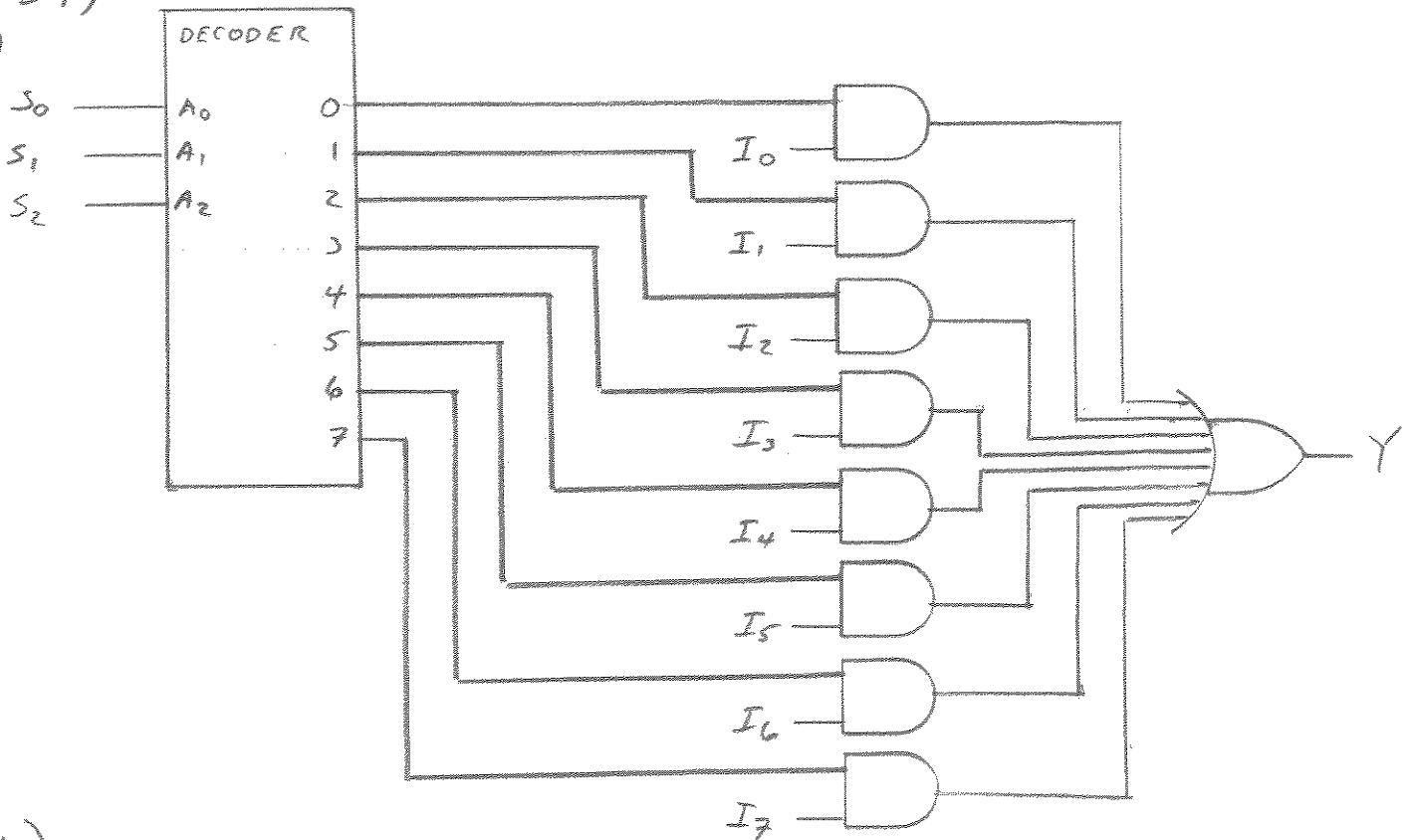
3-29



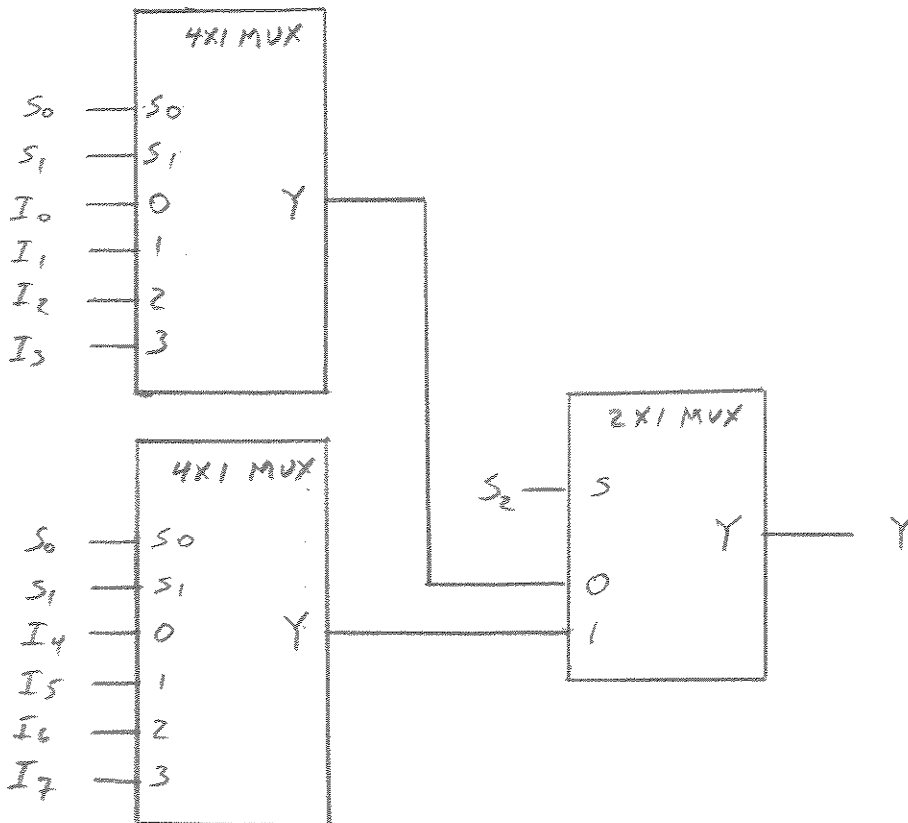
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3-37)

a)



b)



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3-44) $F_1 = \overline{X+Z} + XY\bar{Z} = \bar{X}\bar{Z} + XY\bar{Z}$
 $= \Sigma_m(0, 2, 7)$

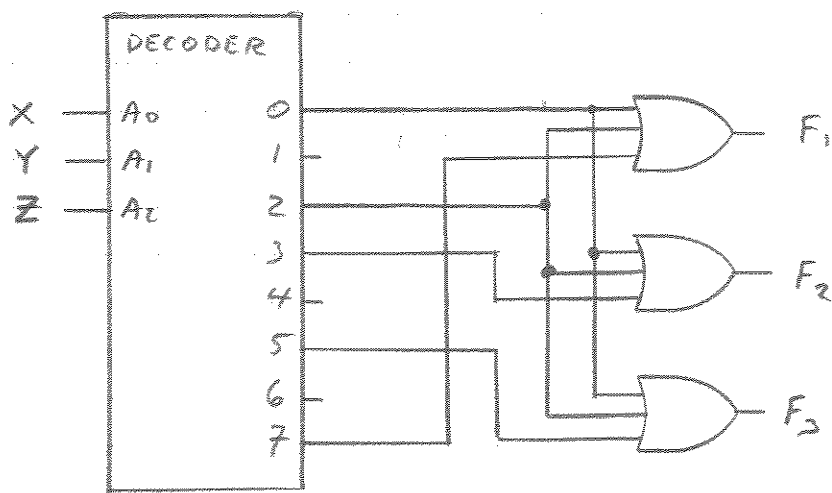
		Y		
	00	01	11	10
0	1			1
X 1			1	
	\bar{Z}			

$F_2 = \overline{X+Z} + \bar{X}YZ = \bar{X}\bar{Z} + \bar{X}YZ$
 $= \Sigma_m(0, 2, 3)$

		Y		
	00	01	11	10
0	1		1	1
1				

$F_3 = X\bar{Y}\bar{Z} + \overline{X+Z} = \bar{X}\bar{Z} + X\bar{Y}\bar{Z}$
 $= \Sigma_m(0, 2, 5)$

		Y		
	00	01	11	10
0	1			1
1		1		

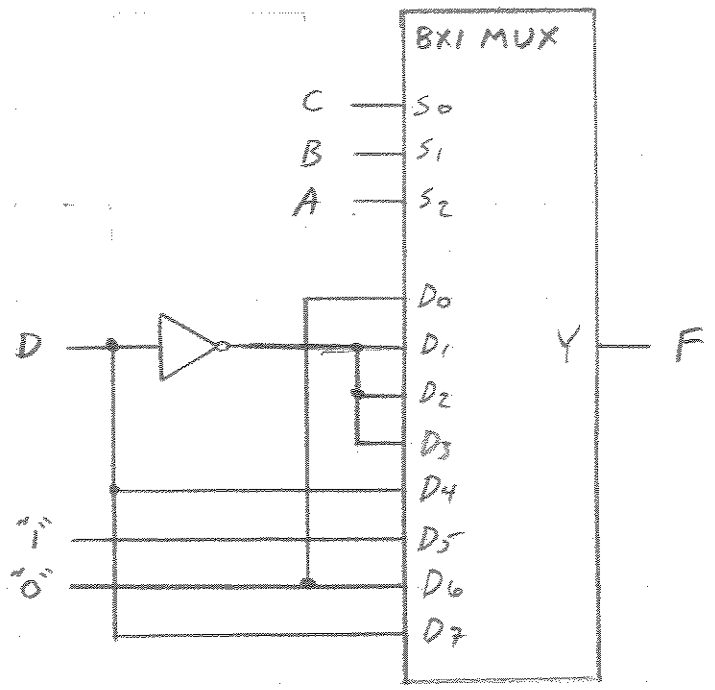


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3-46) $F(A, B, C, D) = \sum m(2, 4, 6, 9, 10, 11, 15)$

A	B	C	D	F
0	0	0	0	0
0	0	0	1	0
0	0	1	0	1
0	0	1	1	0
0	1	0	0	1
0	1	0	1	0
0	1	1	0	1
0	1	1	1	0
1	0	0	0	0
1	0	0	1	1
1	0	1	0	1
1	0	1	1	1
1	1	0	0	0
1	1	0	1	0
1	1	1	0	0
1	1	1	1	1

$F = 0$
 $F = \bar{D}$
 $F = \bar{D}$
 $F = \bar{D}$
 $F = \bar{D}$
 $F = D$
 $F = 1$
 $F = 0$
 $F = D$



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3-47) $F(A, B, C, D) = \sum m(1, 3, 4, 11, 12, 13, 14, 15)$

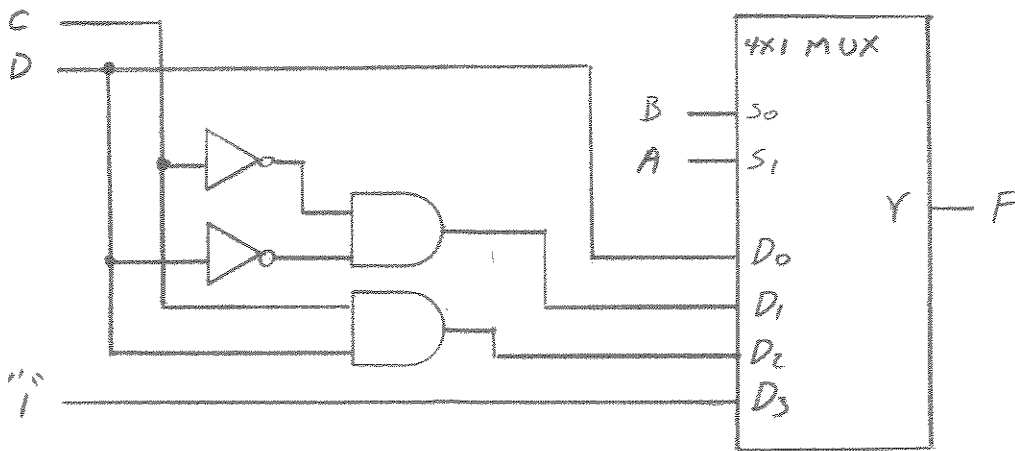
A	B	C	D	F
0	0	0	0	0
0	0	0	1	1
0	0	1	0	0
0	0	1	1	1
0	1	0	0	1
0	1	0	1	0
0	1	1	0	0
0	1	1	1	0
1	0	0	0	0
1	0	0	1	0
1	0	1	0	0
1	0	1	1	1
1	1	0	0	1
1	1	0	1	1
1	1	1	0	1
1	1	1	1	1

$F = D$

$F = \bar{C}\bar{D}$

$F = CD$

$F = 1$



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$$3-48) F(A, B, C, D) = \sum m(1, 3, 4, 11, 12, 13, 14, 15)$$

